CLAIMS

What is claimed is:

1   1.   A method for selecting a scoring mechanism from a plurality scoring mechanisms for

2   processing queries, comprising the steps of:

3   for each scoring mechanism of said plurality of scoring mechanisms, determining,

4   based on a query, multiple parameter values for the scoring mechanism,

5   wherein each parameter value of said multiple parameter values indicates a

6   different characteristic associated with using said scoring mechanism for

7   processing said query;

8   for each scoring mechanism of said plurality of scoring mechanisms, generating a

9   score based on the multiple parameter values determined for the scoring

10   mechanism; and

11   selecting which scoring mechanism to use to process said query based on the score

12   generated for each scoring system.

1   2.   The method of Claim 1, wherein the multiple parameters values comprise a relevance

2   parameter that reflects the relevance of results that would be produced by the scoring

3   mechanism for said query, density of sponsored product items within results that would be

4   produced by using the scoring mechanism to process said query, and a user retention

5   parameter that estimates the likelihood that a user that issued said query will find the results

6   useful.

1   3.   The method of Claim 1, wherein the multiple parameter values comprise a relevance

2   parameter value and the relevance parameter value is determined for each scoring mechanism

3   of said plurality of scoring mechanisms by having a human grade the results produced by

4   each scoring mechanism for one or more sample queries.

1   4.   The method of Claim 1, further comprising the step of determining a relevance

2   parameter value for each scoring mechanism for each category of a plurality of product item

3   categories, wherein each product item category of the plurality of product item categories is

4   selected from the group consisting of a product category, a merchant category, and a product

5   abstraction category.

1   5.   The method of Claim 1, wherein said query is a query received by a search

2   mechanism and one of said multiple parameter values is a density of sponsored product items

3   parameter value and the density of sponsored product items parameter value is determined

4   based on a percentage of sponsored product items in a result set that would be generated for

5   said query for each scoring mechanism of said plurality of scoring mechanisms, wherein a

6   sponsored product item is a particular product item for which a party associated with the

7   particular product item will or has been charged a fee for each inclusion of a reference to said

8   particular product item in results provided by said search mechanism, and wherein a product

9   item is selected from the group consisting of a merchant, a product offering, and a product

10 abstraction.

1   6.   The method of Claim 1, wherein one of the multiple parameter values is a density of

2   sponsored product items parameter value and the density of sponsored product items

3   parameter value is determined based on potential revenue that would be generated by using

4   the result set that would be produced for said query by using each scoring mechanism of said

5   plurality of scoring mechanisms.

1   7.   The method of Claim 1, wherein said query is a query received by a search

2   mechanism and one of the multiple parameter values is a user retention parameter value

3   generated for each scoring mechanism of said plurality of scoring mechanisms and the user

4   retention parameter value is generated for the scoring mechanism based on a percentage of

5   users that return to a website associated with said search mechanism within a predetermined

6   time span after receiving results generated by the scoring mechanism.

1   8.   The method of Claim 1, wherein said query is received by a search mechanism

2   associated with a website, wherein the method further comprises the steps of:

3   placing a cookie on a user's computer;

4   recording for each scoring mechanism of the plurality of scoring mechanisms when

5   the scoring mechanism is selected for use on a user query for the user;

6   determining whether the user has returned to the website based on whether the cookie

7   is on the user's computer; and

8   calculating a user retention parameter value for each scoring mechanism of said

9   plurality of scoring mechanisms based on a percentage of users that have

10   returned to the website within a predetermined time span after using the

11   scoring mechanism, and wherein the user retention parameter value is one of

12   the multiple parameter values.

1   9.   The method of Claim 1, wherein said query is received by a search mechanism

2   associated with a website, wherein the method further comprises the steps of:

3   logging a user into a server;

4   recording for each scoring mechanism of the plurality of scoring mechanisms when

5   the scoring mechanism is selected for use on a user query for the user;

6   determining whether the user has returned to the website based on a history for the

7   user; and

8   calculating a user retention parameter value for each scoring mechanism of said

9   plurality of scoring mechanisms based on a percentage of users that have

10   returned to the website within a predetermined time span after using the

11   scoring mechanism, and wherein the user retention parameter value is one of

12   the multiple parameter values.

1   10.   The method of Claim 1, wherein the step of selecting a scoring mechanism from said

2   plurality of scoring mechanisms comprises performing a functional composition of the

3   parameter values wherein the functional composition is selected from the group consisting of

4   a product of parameter values and a product of squares of parameter values.

1   11.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 1.

1   12.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 2.

1   13.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 3.

1   14.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 4.

1   15.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 5.

1   16.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 6.

1   17.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 7.

1   18.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 8.

1   19.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 9.

1   20.   A machine-readable medium carrying one or more sequences of instructions which,

2   when executed by one or more processors, causes the one or more processors to perform the

3   method recited in Claim 10.